

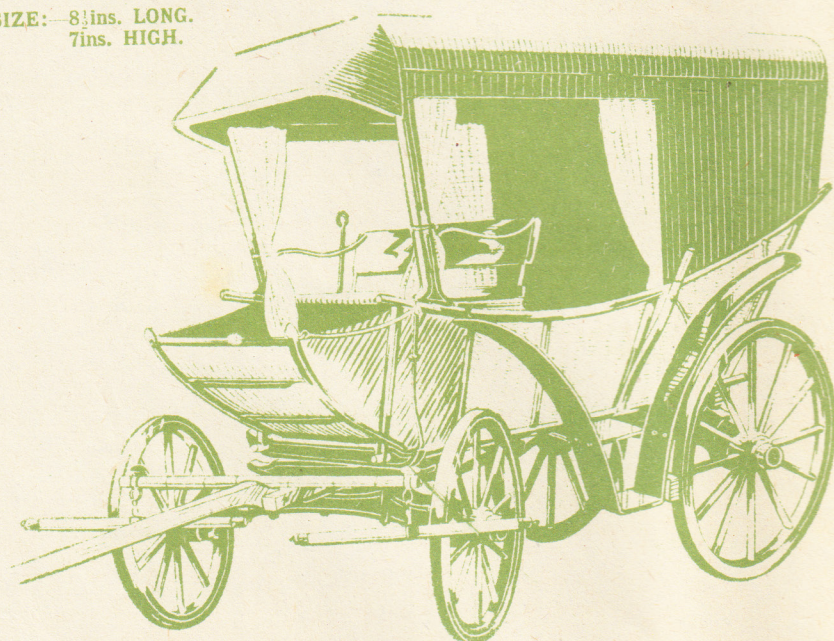


FRETWORK DESIGN No. 245 SPECIAL

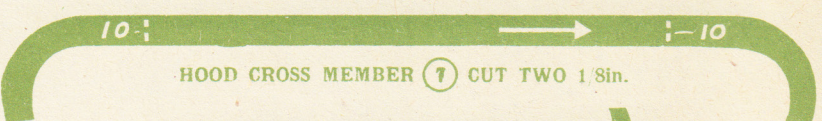
SUPPLEMENT TO HOBBIES No. 2866.
Oct. 4, 1950.

— MODEL OF — FLORENCE NIGHTINGALE CARRIAGE

SIZE: 8 1/2 ins. LONG.
7 ins. HIGH.



CANOPY BACK (6)
CUT ONE 1 1/8 in.
SHAPE LOWER
EDGE TO SECTION.



HOOD CROSS MEMBER (7) CUT TWO 1 1/8 in.

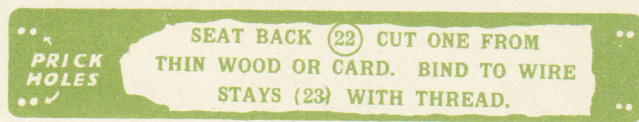
FRONT UPRIGHT (8) CUT TWO 1 1/8 in.

REAR UPRIGHT (9) CUT TWO 1 1/8 in.

FRONT OF CANOPY (11)
CUT ONE FROM PAPER.
BEND AT DOTTED LINES.

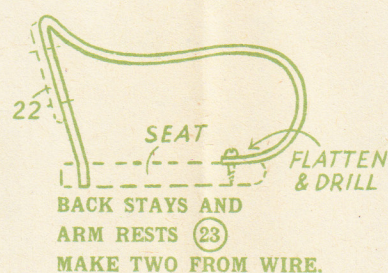


DRIVER'S SEAT (20)
CUT ONE 1 1/8 in. AND ROUND OFF
FRONT EDGE TO
SECTION.

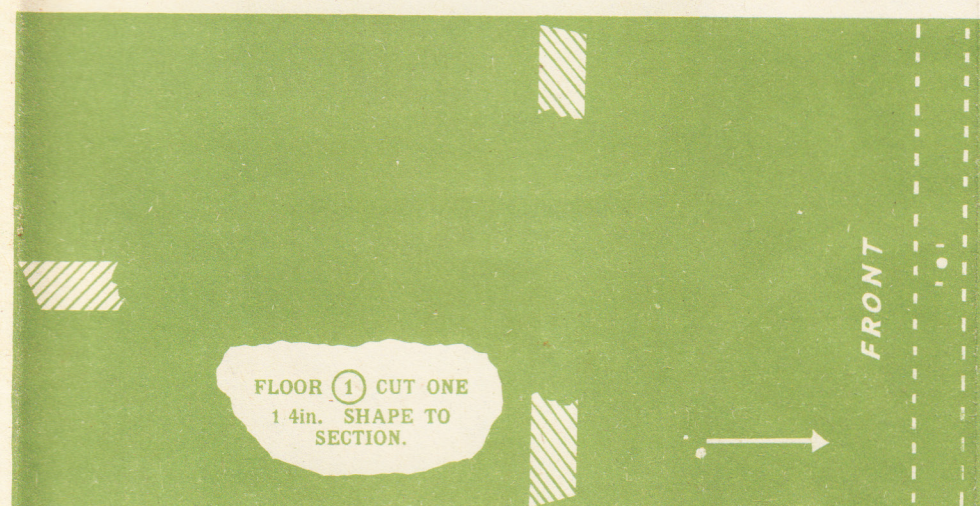


SEAT BACK (22) CUT ONE FROM
THIN WOOD OR CARD. BIND TO WIRE
STAYS (23) WITH THREAD.

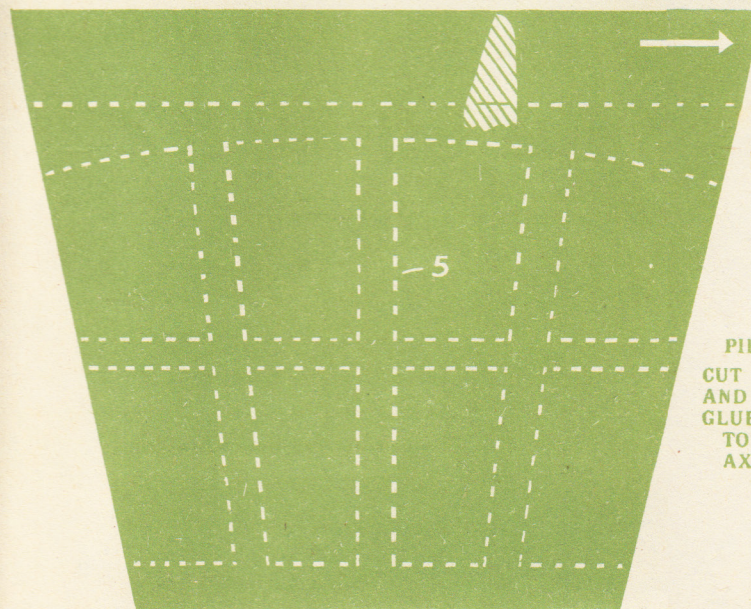
PIECE (21) CUT
TWO AND GLUE
UNDER SEAT TO 3.



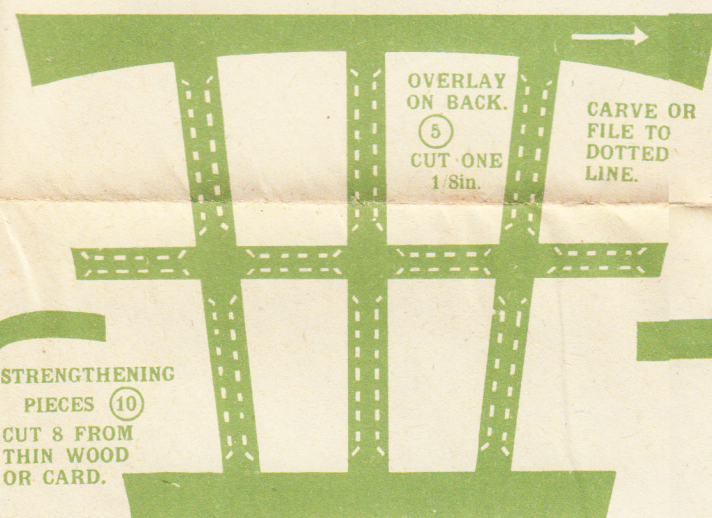
SEAT
BACK STAYS AND
ARM RESTS (23)
MAKE TWO FROM WIRE.



FLOOR (1) CUT ONE
1 1/4 in. SHAPE TO
SECTION.



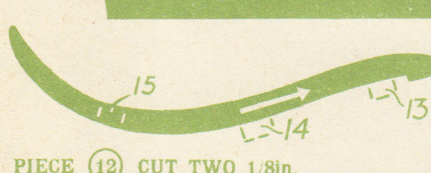
BACK (4)
CUT ONE 1 1/4 in.
SHAPE TO
SECTION.



OVERLAY
ON BACK.
(5)
CUT ONE
1 1/8 in.

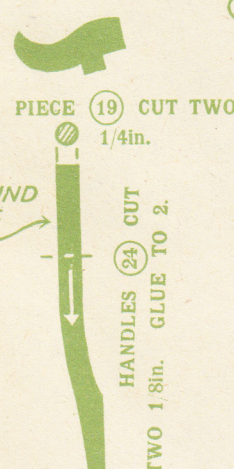
CARVE OR
FILE TO
DOTTED
LINE.

STRENGTHENING
PIECES (10)
CUT 8 FROM
THIN WOOD
OR CARD.



PIECE (12) CUT TWO 1 1/8 in.

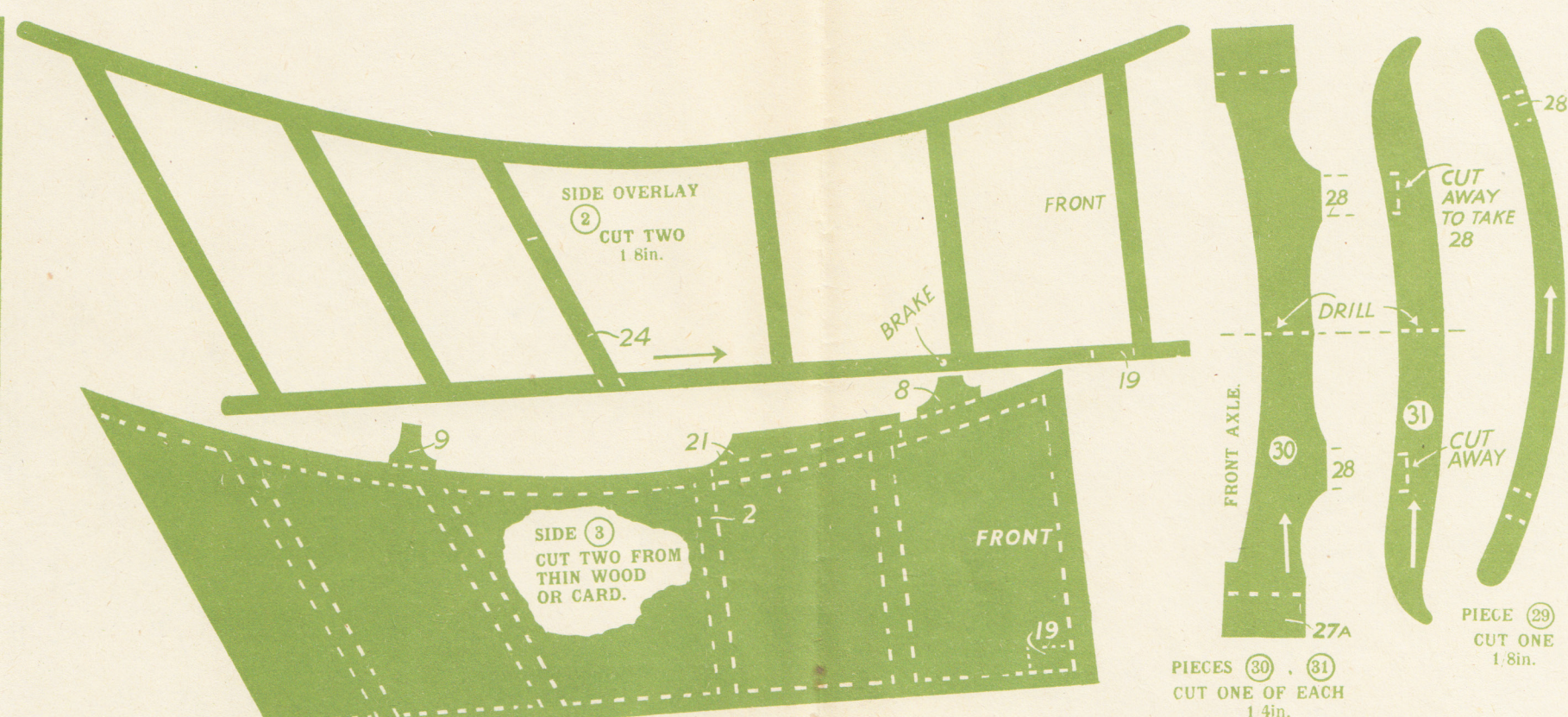
PIECES 13, 14 AND 15.
CUT ONE OF EACH
1 1/8 in.



PIECE (19) CUT TWO
1 1/4 in.
HANDLES (24) CUT
TWO 1 1/8 in. GLUE TO 2.
ROUND
OFF

PIECE (17) MAKE TWO
FROM WIRE.
PIECE (18) BEND TWO
FROM WIRE.

THE ARROWS
INDICATE DIRECTION
OF GRAIN OF
WOOD.



SIDE OVERLAY
(2)
CUT TWO
1 1/8 in.

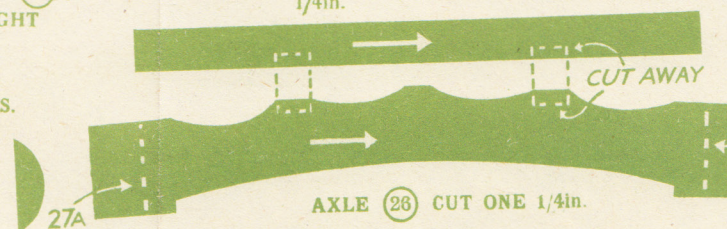
SIDE (3)
CUT TWO FROM
THIN WOOD
OR CARD.

FRONT AXLE.
(30)
(31)
CUT ONE
1 1/4 in.

PIECE (29)
CUT ONE
1 1/8 in.

PIECE (27A)
CUT EIGHT
AND
GLUE
TO
AXLES.

PIECE (25) CUT ONE
1/4 in.



AXLE (28) CUT ONE 1/4 in.

PIECE (32) CUT ONE 1/4 in.

PIECE (33)
CUT TWO FROM WIRE.

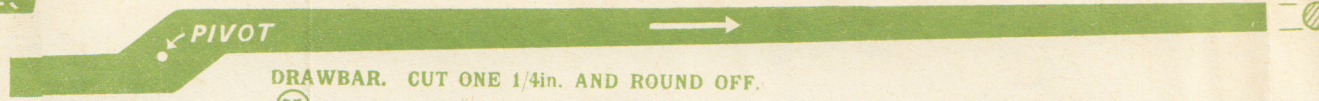
YOKE (34) CUT TWO 1 1/8 in.
AND ROUND OFF.

PIECE (27)
CUT ONE 1/4 in.

PIECE (28)
CUT ONE 1/4 in.

PIECES (37) CUT
TWO 1 1/4 in.

STEPS (38) CUT TWO
FROM THIN WOOD.



DRAWBAR. CUT ONE 1/4 in. AND ROUND OFF.

MUDGUARDS (39) CUT TWO FROM THIN CARD.

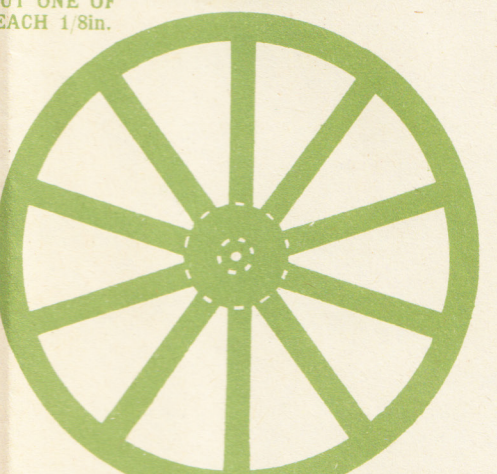
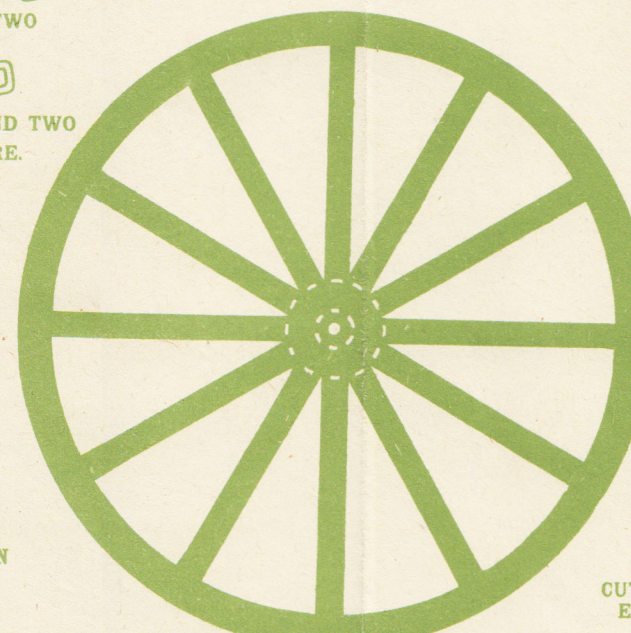
PANELS OF WOOD REQUIRED
FOR THIS DESIGN

**TWO Q4 THREE Q2
TWO P.P.M.**

Materials for making this design are supplied by HOBBIES LIMITED,
Dereham, Norfolk.

Price on application.

NOTE.—This design sheet is only
presented free with the current
issue of Hobbies and not with
back numbers. Further copies
may be obtained.



INNER HUB (40)
CUT FOUR 1 1/8 in.



OUTER HUB (41)
CUT FOUR 1 1/8 in.



HUB CAP (42) CUT
FOUR 1 1/8 in.

THIS IS THE CARRIAGE
USED BY
FLORENCE NIGHTINGALE
(LADY WITH THE LAMP)
DURING THE CRIMEA WAR,
1854-1856.

A COPY OF
THE CARD
HUNG ON THE
ACTUAL CARRIAGE.
CUT OUT AND PASTE
TO CARD.

Constructional details for the Florence Nightingale Coach

THE historical model which can be built from the patterns shown the other side, and Hobbies kit and material, is a novel piece of work which can be undertaken by those experienced in this class of craftsmanship. The coach was the flimsy horse-drawn affair used by Florence Nightingale during the Crimean war, and the original is now proudly possessed by St. Thomas's Hospital, London, to whom we are indebted for details from which the preparation of this model was made. Pictures of the original from the Picture Post Library were also helpful.

The model itself is only 8 1/2 ins. long and is built of thin material to the pattern shown. The construction will require a certain amount of patience and knowledge of model making, apart from the use of the fretsaw for cutting, and the usual small tools for putting together. The parts shown are numbered in accordance with their constructional need, and the patterns shown should be marked direct on to the wood through carbon paper or by means of tracing paper.

Great care must be taken for accuracy, not only in the outlines, but in the shaping where shown, or the chamfering as indicated by the shaded sectional drawings and adjoining parts by dotted lines on the patterns concerned. A study of the sheet in conjunction with the drawings, should be made after reading these details, and speed should not be attempted in putting the parts together.

Commencing with the floor, note the back edge and two sides are chamfered to slope downwards. This must be carefully done in order that the sides and back themselves may slope outwards when fitted. The framework of the sides (2) is covered on the inside with very thin wood or card. The wood is the thin plywood provided in the kit, but card can be used if preferred.

Note that the side overlay should be glued at the front edge first, and that the opposite end will then project a little beyond the solid side itself. Cut out the back and glue on it the overlay (5), shaping something like the spokes of a wheel to reduce the thickness. This

shaping is cut according to the dotted lines, but, of course, does not pass right through the overall thickness.

Have the completed back ready before you fit in the sides, because this will help when gluing in place to keep the whole solid frame at the right angle, and the whole rigid. A cut-away view at Fig. 1 shows this, where you can also see the canopy back (6) glued to the sloping edge at the top of the main back.

The canopy itself is merely a stiff paper covering supported on cross framework. These supports are shown in Fig. 2 and the direction of grain should be noted in parts 7, 8 and 9. 7 and 8 form the top and side, and then a strengthening piece (10) is added round the angle each side to stiffen up (see Fig. 2). The base of Part 8 is glued on the similarly shaped projecting piece on the side. The rear upright (9) is dealt with in the same way. A study of the side and front view will help right through the construction.

Before the canopy is put on, the inside must be painted, and it is also advisable to add the seat. For this purpose, the paper can be omitted until later, care being taken not to damage the supports in the meantime.

At Fig. 3 are details of the front projecting portion forming the space for the driver's feet. The end pieces are of wire, fitted to the side, and then the space filled in with paper (it was leather in the original), and the cross struts added to the front at 13, 14 and 15. At right angles to the side, the wire (16) is fixed and the support given to its bottom end by part 19.

Where possible the end of the wires concerned should be flattened and held with a pin, or the ends turned at a point and driven into the wood. In gluing the paper behind the cross strips 13, 14 and 15, leave 1/16 in. loose, so it can go inside the sides of the carriage and be glued to the floor.

The driver's seat is shown at Fig. 4 and is made of an end framework of wire, fitted to the seat portion (rounded at the front). The back (22) is fitted to the wire near the top by boring tiny holes in the wood and holding the part in place with strong thread drawn through and tied out of sight. Note the two

rests (21) which are glued to the main sides of the coach and support the seat. The chamfer on the top edge is necessary for the seat to lie flat and level.

Fig. 5 shows the fixed parts of the chassis. Part 25 is let in at the point shown by the dotted lines on piece 27, below which in turn, comes the axle portion 26. Note the pivot hole in the front end of the main arm (27) which is fitted under the floor (1) at the front end where shown. A long pin or piece of wire will hold this. Put the pin in place through the holes to give you the position in which the back end can be glued under the floor.

The pin is not finally fixed because the movable front chassis portion comes between this part (27) and the floor, and is pivoted in also. The drawing at Fig. 6 shows the construction of this front undercarriage built very similarly to the other. It pivots on the same pin, and at the front end a draw bar (35) is also pivoted. This draw bar is rounded and fitted with a cross pin so it can be lifted and raised when not in use. The yoke portions are shown in the inside Fig. 6 as well as the method of fitting with wire and card to hang from the carriage portion.

At Fig. 7 you have the wire construction of the brake which is on the outside of the coach, blocks of wood being fitted on as brake blocks. The lever fits into a card or thin wooden ratchet (36), glued to the side of the framework. Fig. 7 gives you the two views showing how the handle lever should work both brakes by means of the under-floor rod which passes through the two support pieces (37).

Mudguards are

made of stiff card, bent as seen in Fig. 8 and held in place with short support wires. The steps (see Fig. 8) are completed of wire with card, the top of the wire being pointed for driving into the underside of the floor.

Each wheel is composed of a single piece of 1/8 in. wood, the spokes being rounded carefully. On the inside of each, the disc (40) is glued, and on the outside of each, the two parts 41 and 42 are also glued (see Fig. 9). Notice these last two have a small circular hole taken out of the centre to form a hollow hub and to allow the long fixing screw to be put through the wheel itself, leaving the hollow ends outwards. The holes for these fixing screws, by the way, should be bored before the circular disc is cut.

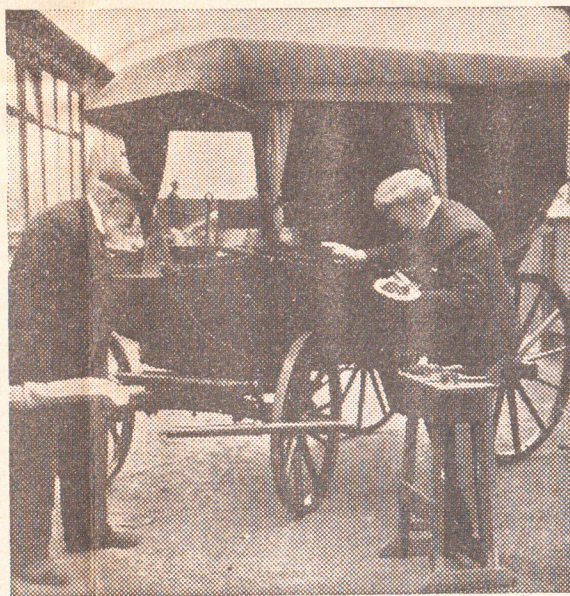
The wheels are screwed on to the axles formed by part 25. To give these a more solid bearing, little discs are formed by gluing on edge the tiny segments (27a) as seen in Fig. 10.

The paper canopy covering can be finally added of fairly stiff paper such as cartridge, or very thin card. It is curved

over the top, dropping slightly each side. Towards the rear end, the side is covered in with stiff paper to form a complete hood, but from there to the front, the model is open, apart from hanging 'curtains'. These can be of any light material draped back. They were, of course, originally intended for drawing to enclose the whole compartment. The front of the canopy is shown to a pattern (11), and the scalloped portion provides tabs which can be bent to form the rounded ends.

Having cleaned all parts, painting can be undertaken. The canopy hood should be glossy black. All framing and wheels are painted black, with red/gold, gold/red lining. Shafts and all iron work, of course, are also painted black. The interior trimming was of khaki cloth with seats black. The main panels of the coach were varnished woven wickerwork in its natural colour, and this could probably be painted on very carefully with straw coloured lines. The front and foremost panel are painted black.

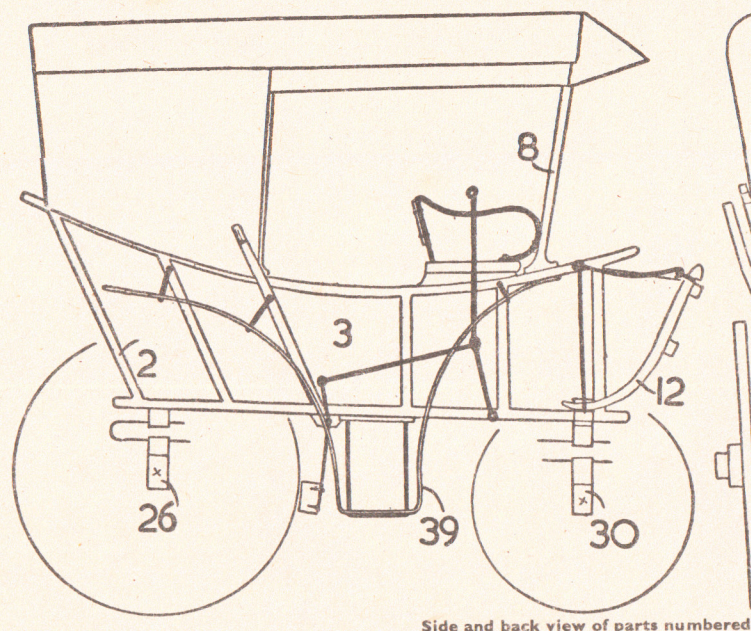
A suitable panel of particulars is printed on the sheet. It can be glued to card or wood and stood by the model when on exhibition.



A worker on the actual coach undertaking renovations



A rear photograph of the actual coach



Side and back view of parts numbered

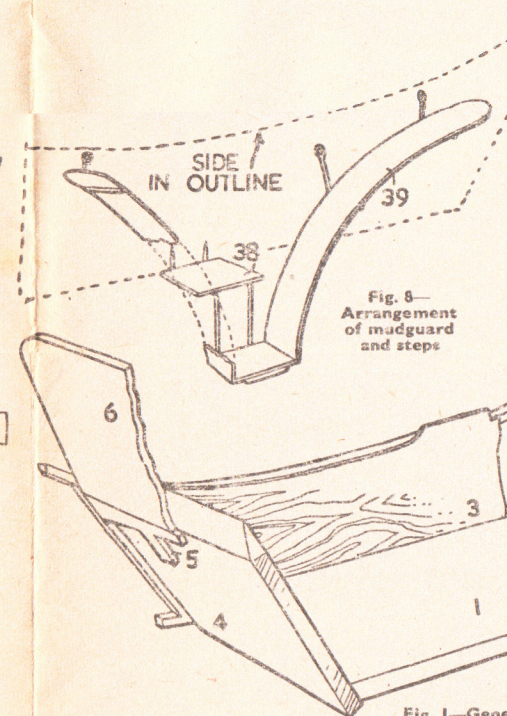
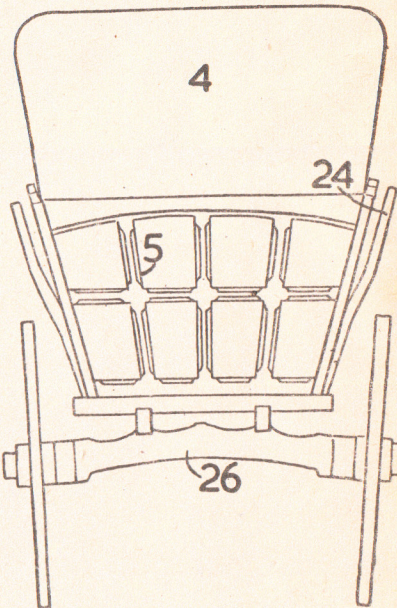


Fig. 8—Arrangement of mudguard and steps

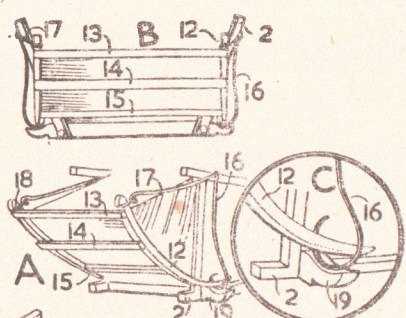


Fig. 3—Driver's foot compartment

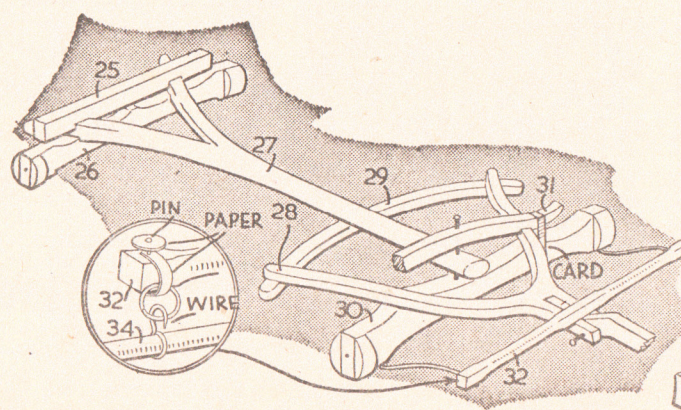


Fig. 6—The movable front chassis

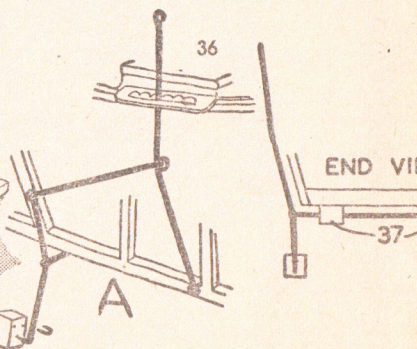


Fig. 7—Details of brake mechanism

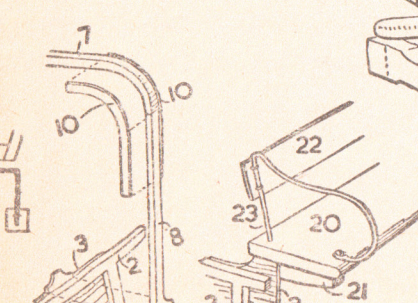


Fig. 2—Hood support

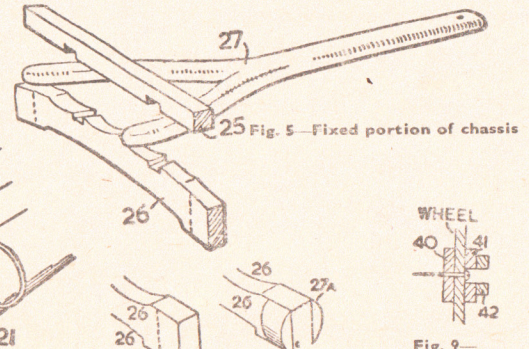


Fig. 5—Fixed portion of chassis

Fig. 10—Axle ends

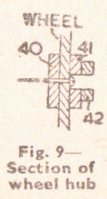


Fig. 9—Section of wheel hub